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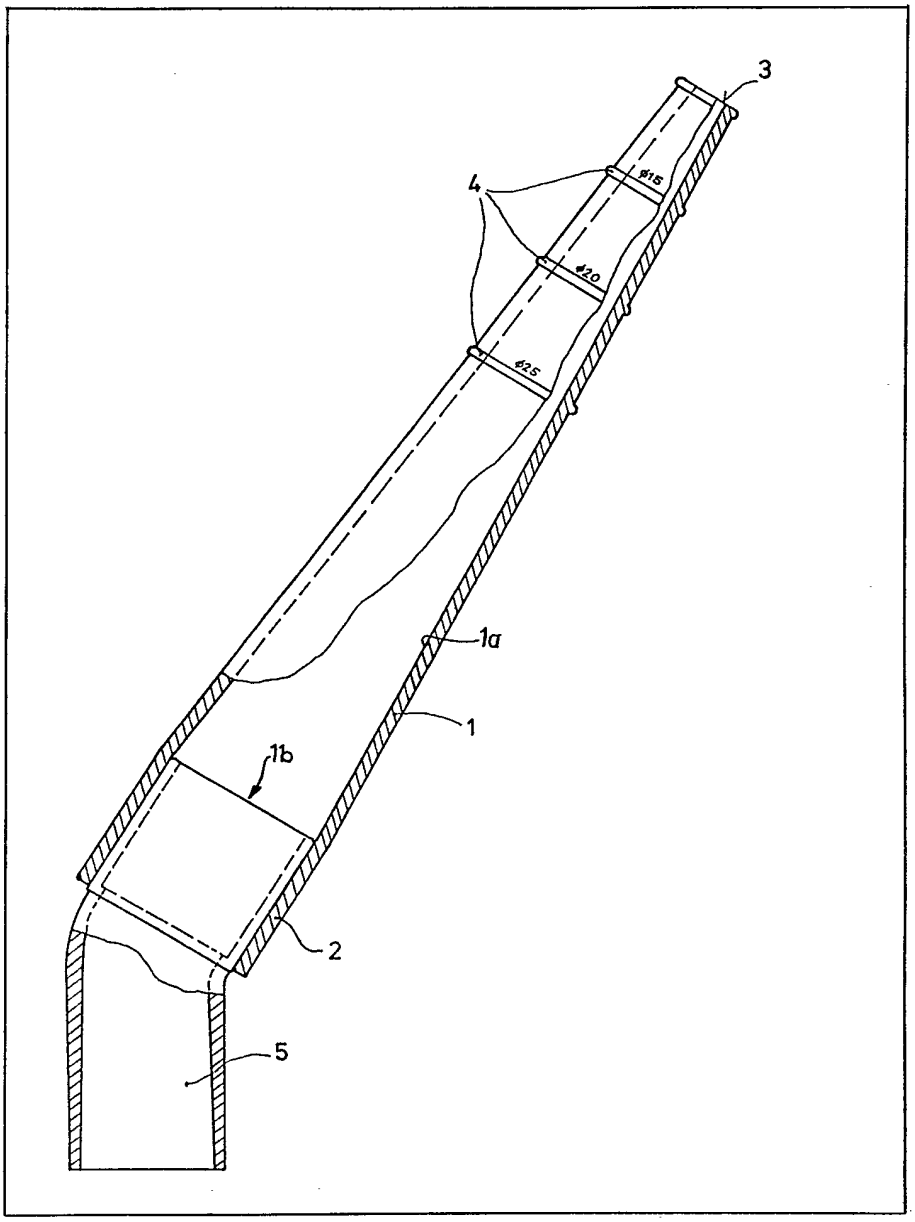
(54) Suction nozzles for vacuum cleaners

(57) A suction nozzle for a vacuum cleaner comprises a body portion (1) defining a suction passage (1*a*), which tapers from outlet (1*b*) to suction orifice (3), and provided with at least one marking (4) for indicating a point of particular cross-section, whereby the body portion (1) can be cut with reference to the marking(s) to provide a suction orifice of desired size and shape. Preferably the body portion is made of oil-resistant rubber having a Shore scleroscope hardness of 85 ± 5. The nozzle is particularly suitable for use in confined spaces.



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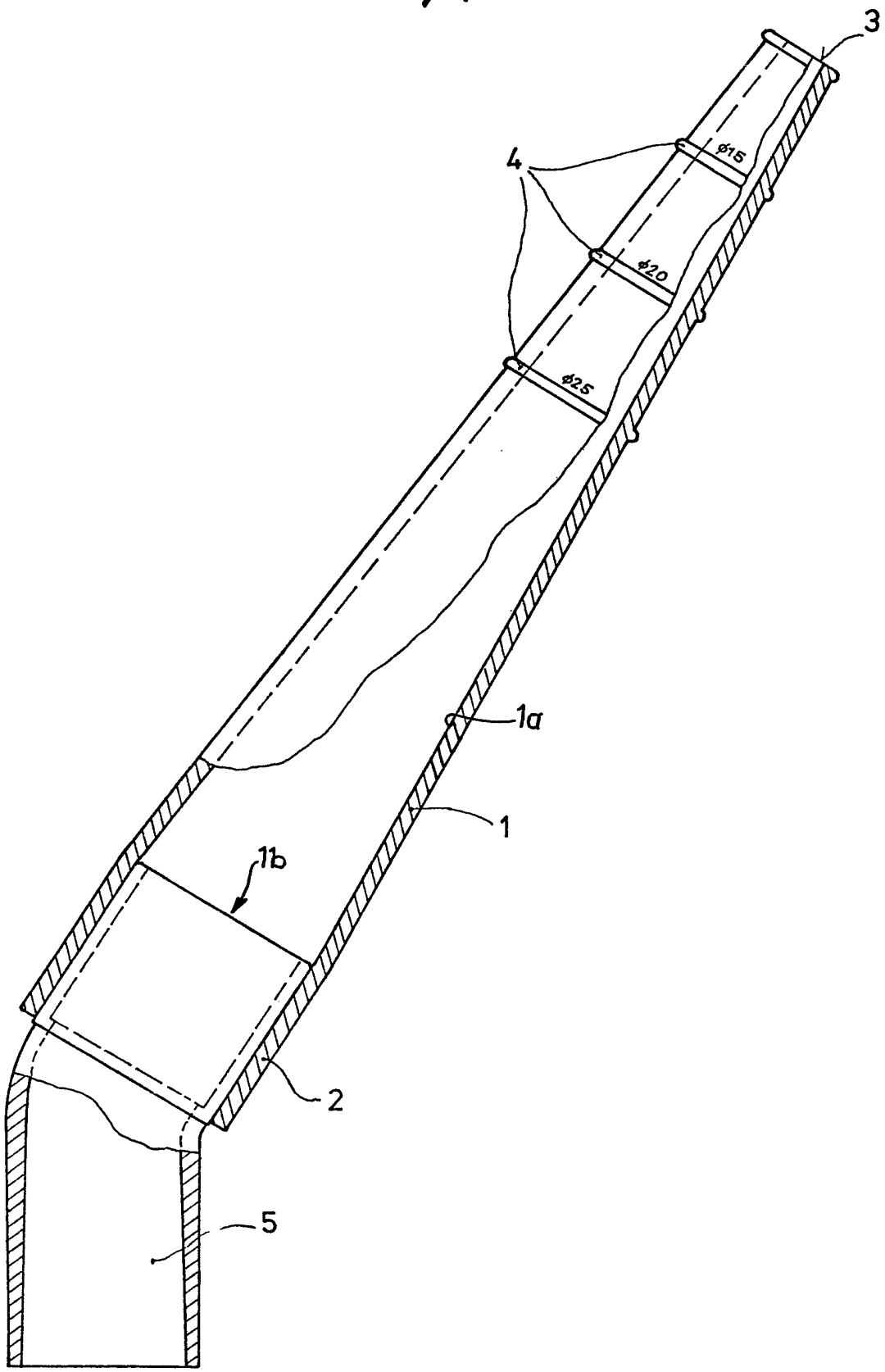
3
4
φ15
φ20
φ25
1a
1
1b
2
5

SPECIFICATION

Improvements in or relating to suction nozzles for vacuum cleaners

This invention relates to suction nozzles for vacuum cleaners.

According to the present invention there is provided a suction nozzle for a vacuum cleaner comprising a body connectable to the suction pipe of the vacuum cleaner and defining a suction passage extending from a suction orifice to an outlet, the body having a varying cross-section at least adjacent the suction orifice and at least one marking for indicating a point of particular cross-section whereby the body can be cut with reference to the marking or markings to provide a suction orifice of desired shape and/or cross-section.

The body may taper towards the suction orifice.

The body may be flexible.

In any of these cases the suction orifice end of the suction passage may be closed prior to cutting. Alternatively it may be open to provide a further available cross-section for the orifice.

The nozzle may include a tube engaged in the body for connecting the body to the suction pipe.

The body may be made of oil-resistant rubber, which may possess a Shore scleroscope hardness of 85 ± 5. The cross-section of the body may be circular and the markings may indicate cross-sections of increasing diameter. In this case the marked diameters may be 15 mm, 20 mm and 25 mm and the diameter of the suction orifice end of the passage may be 10 mm.

The markings may be constituted by swellings or projections on the body or may be otherwise formed in the body.

The invention may be performed in various ways a specific embodiment of which will now be described by way of example with reference to the accompanying drawing, which is a partially cut-way side view of a suction nozzle for use with a vacuum cleaner.

Suction orifices of a given diameter are often required for particular jobs particularly when access is limited, for example in pigeon holes and in bookcases. However it is expensive to provide a range of different sized nozzles because a new tool can be required to make each nozzle size. Further nozzles are generally rigid and cannot readily be used around bends or corners.

The drawing shows a suction nozzle comprising a body having a hollow conically tapering body portion 1 and an annular connecting collar 2, and an elbow tube 5 engaged in the collar 2 to connect the nozzle to the suction pipe (not shown) of a vacuum cleaner. The body defines a suction passage 1*a* which tapers from an outlet 1*b* towards a suction orifice 3 at the narrow end of portion 1. The diameter of orifice 3 may be 10 mm. Spaced annular projections or swellings 4 are provided at spaced intervals of increasing diameter, for example 15 mm, 20 mm and 25 mm.

If it is desired to have an orifice of 15 mm diameter the body portion 1 is cut at the 15 mm marking. Alternatively, if an elliptical cross-section nozzle is required, a cut may start, for example, at one side adjacent the 15 mm marking and end adjacent the 20 mm marking on the other side. Additionally or alternatively longitudinal cuts may be made to obtain suitable suction orifices.

Thus it will be seen that by cutting the tube with reference to the markings in an appropriate manner a whole range of shapes and sizes of cross-section for the suction orifice 3 can be obtained from a single moulding of the body portion 1. Further the consumer may select the particular suction orifice shape and size he requires.

Preferably the body portion 1 is made of a flexible material such as oil-resistant rubber. The rubber may have a Shore scleroscope hardness of 85 ± 5. The flexibility of the body portion 1 enhances the use of the nozzle in confined spaces.

The body portion is preferably moulded.

The connecting elbows 5 may be made of polyamide.

The markings need not be circumferentially continuous and may be constituted by indentations.

CLAIMS

1. A suction nozzle for a vacuum cleaner comprising a body connectable to the suction pipe of the vacuum cleaner and defining a suction passage extending from a suction orifice to an outlet, the body having a varying cross-section at least adjacent the suction orifice and at least one marking for indicating a point of particular cross-section whereby the body can be cut with reference to the marking or markings to provide a suction orifice of desired shape and/or cross-section.

2. A nozzle as claimed in Claim 1, wherein the body tapers towards the suction orifice.

3. A nozzle as claimed in Claim 1 or Claim 2, wherein the body is flexible.

4. A nozzle as claimed in any one of the preceding claims where the suction orifice end of the suction passage is closed prior to cutting.

5. A nozzle as claimed in Claims 1 to 3, wherein the suction orifice end of the suction passage is open to provide a further available cross-section.

6. A nozzle as claimed in any one of the preceding claims further including a tube engaged in the body for connecting, in use, the outlet of the suction passage to the suction pipe.

7. A nozzle as claimed in any one of the preceding claims, wherein the body is made of oil-resistant rubber.

8. A nozzle as claimed in Claim 7, wherein the rubber possesses a Shore scleroscope hardness of 85 ± 5.

9. A nozzle as claimed in any one of the preceding claims, wherein the body has a circular cross-section and the markings indicate cross-sections of increasing diameter.

10. A nozzle as claimed in Claim 9, wherein the marked diameters are 15 mm, 20 mm and 25 mm

and wherein the diameter of the body at the suction orifice end of the passage is 10 mm.

11. A nozzle as claimed in any one of the preceding claims, wherein the markings are constituted by swellings or projections on the body.

12. A suction nozzle for a vacuum cleaner, as hereinbefore described with reference to the accompanying drawing.

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